(d) When requested, technical assistance may be provided to owners, operators, or groups using land that is under the jurisdiction of the United States Department of the Interior if such land is included in a conservation district or if assistance is in accordance with memorandums of understanding identifying the coordination of agency activities.

# §610.4 Technical assistance furnished.

The Natural Resources Conservation Service provides technical assistance to land users and others who are responsible for making decisions and setting policies that influence land use, conservation treatment, and resource management. Technical assistance furnished by NRCS consists of program assistance, planning assistance, application of conservation practices, and assistance in the technical phases of USDA cost-share programs.

- (a) Program assistance is provided to conservation districts and other organizations concerned with the conservation of soil, water, plant, and wildlife resources. This assistance includes providing resource inventory data and identifying conservation problems and needs in order for districts to develop long-range soil and water conservation programs. Individuals, groups, and organizations requesting NRCS assistance through conservation districts include:
- (1) Farmers, ranchers, and other land users concerned with the conservation of land and water resources.
- (2) County and other local government units such as park authorities, departments of public works, planning, zoning (rural, urban, and flood plain), school, and institution boards, highway departments, and tax assessors.
- (3) Citizen groups, youth groups, recreation groups, and garden clubs.
- (4) State and local units of government (highway, health, recreation, water resources, and regional planning) involved in establishing public policy regarding the use of resources.
- (5) Federal departments and agencies such as Defense, Housing and Urban Development, Public Roads, Health and Human Services; and Interior.
- (6) Professional consultants who provide services such as engineering, plan-

ning, environmental assessment, tax assessment, and forest management.

- (b) Planning assistance includes evaluation of soil, water, vegetation, and other resource data needed for making land use, environmental and conservation treatment decisions. NRCS helps land users make conservation plans for farms, ranches, and other land units. This help includes onsite planning assistance in making conservation plans. The plans are based on a soil survey and interpretations for the intended land uses and conservation treatment. Plans may also include other inventories of soil, water, plant, and related resources needed in the planning process. Information about the responses of each kind of soil and the conservation practices and resource management needed for different land uses is provided. The land user's decisions recorded in the plan are based on his conservation objectives. Conservation plans provide for the orderly installation of conservation practices. Conservation plans reflect changing conditions.
- (c) Application assistance is provided to help land users apply and maintain planned conservation work. NRCS assistance for applying the conservation practices in the plan may include:
- (1) Designing, constructing, and maintaining conservation practices;
- (2) Selecting management alternatives and cultural practices needed to establish and maintain vegetation; and
- (3) Other conservation practices needed to protect land and water resources.
- (d) The Natural Resources Conservation Service assists in carrying out certain phases of USDA soil and water conservation cost-share programs. NRCS assists individual program participants with conservation plans needed for long-term cost-share agreements. NRCS is assigned responsibility by the Secretary of Agriculture for technical phases of applying conservation practices on the land. This assignment includes:
- (1) Determining what practices are needed and feasible to install, (2) selecting sites and planning and designing practices, (3) providing assistance

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for installing practices, and (4) certifying that the work done is in accordance with NRCS standards and specifications.

[42 FR 38169, July 27, 1977, as amended at 47 FR 56473, Dec. 17, 1982]

#### § 610.5 Interdisciplinary assistance.

Technical assistance is based on the principle that soil, water, plant, and related resources are interdependent and must be managed accordingly. Soil conservationists integrate the various technical fields in providing for the conservation of land and water resources. Staff scientists and specialists develop conservation standards, prepare necessary specifications, provide training, and review work performance, NRCS uses consultants for conservation problems that require special expertise.

# Subpart B—Soil Erosion Prediction Equations

SOURCE: 61 FR 27999, June 4, 1996, unless otherwise noted.

## §610.11 Purpose and scope.

This subpart sets forth the equations and rules for utilizing the equations that are used by the Natural Resources Conservation Service (NRCS) to predict soil erosion due to water and wind. Section 301 of the Federal Agriculture Improvement and Reform Act of 1996 (FAIRA) and the Food Security Act, as amended, 16 U.S.C. 3801-3813 specified that the Secretary would publish the universal soil loss equation (USLE) and wind erosion equation (WEQ) used by the Department within 60 days of the enactment of FAIRA. This subpart sets forth the equations, definition of factors, and provides the rules under which NRCS will utilize the USLE, the revised universal soil loss equation (RUSLE), and the WEQ.

# §610.12 Equations for predicting soil loss due to water erosion.

(a) The equation for predicting soil loss due to erosion for both the USLE and the RUSLE is  $A = R \times K \times LS \times C \times P$ . (For further information about USLE see the U.S. Department of Agriculture Handbook 537, "Predicting

Rainfall Erosion Losses—A Guide to Conservation Planning," dated 1978. Copies of this document are available from the Natural Resources Conservation Service, P.O. Box 2890, Washington, DC 20013. For further information about RUSLE see the U.S. Department of Agriculture Handbook 703, "Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)." Copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.)

- (b) The factors in the USLE equation are:
- (1) *A* is the estimation of average annual soil loss in tons per acre caused by sheet and rill erosion.
- (2) *R* is the rainfall erosivity factor. Accounts for the energy and intensity of rainstorms.
- (3) K is the soil erodibility factor. Measures the susceptibility of a soil to erode under a standard condition.
- (4) *LS* is the slope length and steepness factor. Accounts for the effect of length and steepness of slope on erosion.
- (5) *C* is the cover and management factor. Estimates the soil loss ratio for each of 4 or 5 crop stage periods throughout the year, accounting for the combined effect of all the interelated cover and management variables.
- (6) P is the support practice factor. Accounts for the effect of conservation support practices, such as contouring, contour stripcropping, and terraces on soil erosion.
- (c) The factors in the RUSLE equation are defined as follows:
- (1) A is the estimation of average annual soil loss in tons per acre caused by sheet and rill erosion.
- (2) R is the rainfall erosivity factor. Accounts for the energy and intensity of rainstorms.
- (3) *K* is the soil erodibility factor. Measures the susceptibility of a soil to erode under a standard condition and adjusts it bi-monthly for the effects of freezing and thawing, and soil moisture.
- (4) LS is the slope length and steepness factor. Accounts for the effect of